



LOCK MANUFACTURING IN ALIGARH

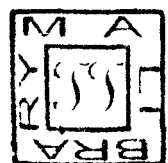
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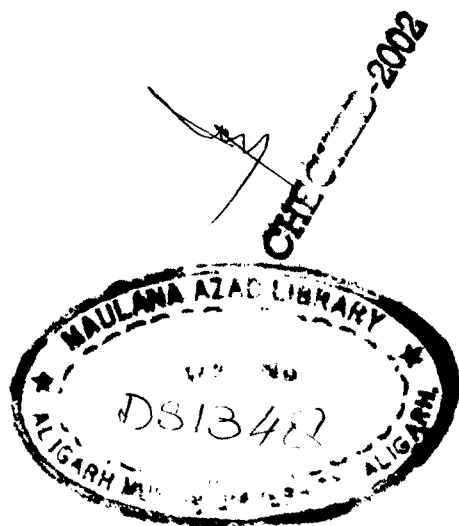
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IFFAT FARIDI

DEPARTMENT OF ECONOMICS
ALIGARH MUSLIM UNIVERSITY
ALIGARH

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TO WHOM IT MAY CONCERN

It gives me pleasure to certify that Miss Iffat Faridi's dissertation entitled "Lock Manufacturing ^{Industry like} in Aligarh" is the work done by herself and to the best of my knowledge no one else here or elsewhere has done work of this kind for the award of any research degree. It makes an original contribution in the subject and is worth submission for the award of the degree of Master of Philosophy in Economics of the Aligarh University, Aligarh.


6/4/1986

(MOHAMMAD SHABBIR KHAN)

Formerly Professor of Economics
at the Aligarh Muslim University
and at present Honorary Professor
of Economics at the L.N.Misra
Institute of Economic Development
and Social Change, Patna.

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Iffat Faridi

IFFAT FARIDI

Department of Economics

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INTRODUCTION

The city of Aligarh has long been known all over the country for its lock industry. In fact, the moment the name Aligarh is mentioned, the inevitable response comes-"Oh the city of locks." And why not? If we see the present status of Aligarh we note that there are nearly three thousand units manufacturing locks and its components employing as many as one lakh people with a turnover of thirty crores rupees per annum,¹ colossal by all standards. Lock units are dispersed all over the city, almost in every street, lane and bylane and play a dominant role in the economic life of the city.

At present, almost the whole industry is reserved for small scale sector excluding the Tiger Group of Industries which comes under the big and organised units of the district.² The whole structure of lock industry may be divided into three categories:

- (a) Small Scale Factories - the units producing forty to eighty per cent of the components by themselves, registered with District Industries Centre and employing labour from outside.
- (b) Cottage or household units which are residence-cum-workshops where parts of locks are produced and supplied to small factories. Their manufacturing operations

are carried out mostly with the help of family labour and earthy tools.

- (c) The traders on commission agents, who buy all the components of locks from the household units and after getting them assembled, sell the locks under their own brands. In the present study we have excluded such commission agents or traders.

Aligarh ranks first in manufacturing locks for national market and shares 80% of the turnover of Indian lock industry.³ As this industry comes under the small scale sector, it also enjoys the facilities and concessions granted by the government to the small scale industries. Even then the industry has been encountering a large number of problems regarding finance, raw materials, marketing etc; and since it is still not running on modern lines it is not able to compete well in the international market.

In the present study an attempt has been made to present a critical review of the industry in which the structure and the present position of the industry have been evaluated. The problems of the industry have been discussed along with appropriate remedies with the help of which the industry may come out of stagnation, existing so far.

The study has an emperical basis. Data have been collected through questionnaire, personal visits to the lock units and interviews arranged with the manufacturers, artisans, bankers and government officials to give a more realistic approach to the subject matter. However, on practical considerations such as largely unorganised nature of these units, their dispersal location and difficulty of coverage, entrepreneur's resistance to part with information, the absence of accounting habits and so many other complicationns, it was found necessary to restrict the field of investigation to a managable area and to a fixed number of units. Obviously in case of an individual researcher it is not possible to cover the whole industry.

Therefore, we have adopted the method of random sampling. The samples have been selected on the basis of standard technique as provided by the Indian statistical Institute and the Central Statistical Organisation. The sampling unit of the survey, i.e., lock manufacturing units include both, small factories and household and cotttage industries. Out of 250 units registered with District Industry Centre, Aligarh 50(20%) units were selected. This is a fairly high percentage and gives a fairly good idea of the whole of industry because the chances of bias in one way or the other are completely eliminated. Since with the help of the method, that has been used, it is possible to have an idea about the errors of estimation, we can find out whether the results are significant or not.

However, household units are highly unorganised in character. It is therefore difficult to ascertain the exact number and location of undertakings. Lack of reliable statistics also makes it difficult to know the correct position. As such only a rough estimate can be made. Nearly fifty household industries were also covered during the survey to present their position separately. However, these units were selected on what may be termed as purposive sampling so that different types of them could be included for indepth study.

The subject matter of the study has been discussed in six chapters.

In the first chapter a general review of the small scale industries has been given, their significant contribution in Indian economy has been discussed along with the policies adopted by the government in order to boost up the small scale sector.

In Chapter II, an economic profile of U.P., position and contribution of small scale industries in the state has been briefly discussed.

Chapter III presents a brief history of the Aligarh Lock Industry.

In Chapter IV the present position of the industry has been evaluated, highlighting the different aspects of production like managerial and manufacturing set up, labour raw materials, tools and machines etc. Existing problems with these aspects and possible measures have also been discussed here.

Chapter V highlights the financial and marketing structure of lock industry, the problems related to them and their remedies.

Chapter VI deals with the technical problems of the industry. The reasons why manufacturers still stick to traditional and primitive technology, the need of modernisation of industry and the methods, through which central and state governments can encourage the lock manufacturers to adopt improved technology, have also been dealt with.

The seventh Chapter presents summary and conclusions.

R E F E R E N C E S

1. Government of Uttar Pradesh, Planning Department,
Draft Seventh Five Year Plan 1985-90, Volume I,
p. 356
2. Lead Bank Office, Canara Bank, Aligarh District
Credit Plan, 1983-85 and Annual Action Plan 1983
for Aligarh District (Uttar Pradesh) P. 10.
3. Souvenir, Seminar on locks, March 21, 1982.

CHAPTER I

SMALL SCALE INDUSTRIES - A REVIEW

It is a well known fact that small scale industries play a strategic role in the industrial development of under-developed countries. The multi-dimensional benefits associated with small scale industries have made it the most important of all the remedial steps being undertaken to cure the economic ailments of Third World Nations.¹ The phenomenal and flourishing growth of small scale industries in India is a direct result of strong backing by government which has recognised the multiple benefits associated with them. The importance of this sector lies in various socio-economic objectives that can be achieved within a short span of time, viz, creation of employment opportunities for skilled and semi-skilled persons in very large number, creation of strong industrial base with relatively low investment, utilization of resources thus raising output, income and living standard, providing opportunities to new entrepreneurs and most importantly-removing the class conflict by helping the growth of the backward and economically weaker section of society.²

The studies on impact of rapid industrialization undertaken by developing nations relying on aid and grants from developed countries and various international agencies like world Bank, IMF etc would bring forward arguments in support of present

emphasis on growth of small scale industries. India being one of such nations, provides a classical example for such a study.

Post independence era saw emphasis being given to rapid industrialization to restore parity with developed nations. Another motive was to diversify the dependence on agricultural section in which vulnerability to vagaries of monsoon was too well known. Since the country lacked basic infrastructure and basic research activities needed for establishing giant projects especially in steel, fertilizers and defence equipments, it was planned to import the foreign technology in the form of turnkey projects and foreign collaborations were thus made, using financial aids and grants extended by developed countries. But the second and most important phase that of country's own research and development programme received a setback due to lack of advance research facilities. The result was that the nation grew more dependent on imported technology to keep the pace of Industrial growth and its planned targets. This caused a huge and permanent drain on the country's foreign currency reserves. Three more factors aggravated the situation: First, a population explosion in post independent period created a large labour force in search of jobs. The inadequate and poor controls on population rise put the country's economy under terrific strain; it upset the economic growth during the planning period. Secondly,

a large migration from villages to urban areas in search of lucrative jobs in factories and industrial townships led to rapid growth of cities, with this migration the agricultural and agro-industries got neglected. At the same time those who migrated could not find the right kind of jobs thus leading to large scale labour unrest.³ And thirdly, as a result of over-optimistic approach towards establishing technical institutes, engineering colleges all over country, which churned out thousands of highly skilled technical hands, with mechanical efficiency every year. With job opportunities growing rare, a lot of frustration set in among the youngsters, which resulted in brain-drain phenomenon in the country.⁴

Thus, the principle elements in the economic picture of India were a rapid growth of population, increasing labour force, dwindling capital resources, mounting trade deficit, wide-spread unemployment and underemployment of technically trained personnels and concentration of industries in and around big cities. A drastic change, a major overhaul of policies and a more balanced approach was needed towards industrial development. It was in this context that our planners thought of developing small scale industries with appropriate technology i.e. technology developed within the country keeping in view available raw material and other local conditions.

The ground for development of small scale industries was the workable solution, it provided for absorption of labour force. It paved way for substitution of labour for capital, more correctly, intensive utilization of small capital by application of greater amounts of labour. Emphasis shifted from capital intensive industry, which needed lesser labour force per unit of capital investment due to automation of processes, to labour intensive manufacturing techniques.⁵ It has been estimated by the Development Commissioner of Small Scale Industries (DCSSI) that a project in small scale sector with an investment of Rs. One million normally provides employment to 172 persons while the same number of employees in the large sector would require an investment of Rs. 5.31 million.⁶ The ability of small scale sector to create immediate and permanent employment on a very large scale, especially in rural and semi urban areas, provided the government a tool to reverse the destabilising trends in industrial growth of the nation.

The growth of small scale industries proved to be a boon for this country which has a large agricultural base with high population growth. While creating a large number of jobs in rural area the growth of this sector did not prove to be very taxing to government's financial position because

most of the machinery and manufacturing technology is indigenously developed and therefore, available without any strings attached to it. The simplicity of technology reduced the maintenance costs and the need for too skilled a person also diminished.⁷

The role of small scale industries has really been commendable in meeting a substantial part of the increased demand of consumer's goods and simple producer's goods for which country completely relied upon multinationals, earlier. Using simple manufacturing technology and locally available raw material, small scale industries can produce the consumer goods at least in semi urban areas. This trend can also discourage the concentration of power in a few hands. The ability of small scale industries, to produce goods specially tailored to meet local requirements and market these at a cheaper rate, can really make these units popular in their regions.

Another inherent quality of all small scale industries has been their ability to utilize and mobilize resources of capital and skills that remained unmobilised hitherto. Many entrepreneurs who had plans but no capital to put those projects in practice have succeeded by participating in small scale industries either singularly or in partnership thus

putting to use their limited capital resources, the overall quantum of which was large when seen in a national framework, but was not adequate for establishment of large industrial units. By tapping the sources of capital which remained out of reach of big industry, by dynamic entrepreneurship the small scale industries have contributed a lot in the form of material capital to national resources.⁸

The expanding realm of small scale industries can improve the standard of living, levels of earnings of a large number of artisans, craftsmen and entrepreneurs who were facing the problem of being unemployed and low paid. By establishing their own industry, however small it may be, with the help of small savings and liberal loans, artisans can prove the effectiveness of their skill. Their work has been well accepted by consumers and by capturing the imagination of public especially in the field of handicrafts and arts, the entrepreneurs can earn themselves a financial bonanza.⁹

One of the most important social objective, that small industries have helped in achieving, is the dispersal of national income among all the segments of society especially the economically weaker section. This has happened because the industrial growth has covered a wider section of society. The growth of small scale industries can successfully stop proliferation of Industrial monopoly tended to concentrate the financial

gains to just a few big industrialists. This situation can be successfully diffused with ownership not restricted to just a few big business houses any more.¹⁰

The growth of small scale industries in rural areas has provided job opportunities to rural population, which can stop the labour migration from these areas to cities, a phenomenon which had put many large cities under the shadow of habitation the slums.¹¹ With employment opportunities near home and improved quite a bit in villages and small townships, the agro-based small industries have encouraged the farmers to grow cash crops specially oil seeds which they can easily sell to the processing units. With a regular selling place nearby, the farmers are using better implements and seeds to enhance the yields of their crops.¹²

Not only the industrial base of the country could be strengthened, the small sector can prove to be the learning centres of entrepreneurial and managerial skills. Young entrepreneurs can learn and get exposed to the fundamentals of management in their own small enterprises. This experience gives them a confidence, a moral boost which may prove helpful when they grow in business and step into the world of big industrialists.¹³

CONTRIBUTION OF SSI-A STATISTICAL ANALYSIS

The arguments in favour of growth of small scale industries, underlining its importance, can be easily sub-

stantiated with the help of data available about its performance over last few years. From the figures covering investment, production, employment and exports one can gauge the momentum of growth of small scale industries.

Table 1 : Growth of Small Scale Industries in India

Particulars	1980-81	1981-82	1982-83	1983-84	1984-85
No. of units					
a) Registered	4.48	5.23	6.07	6.87	7.90
b) Unregistered	4.26	4.34	4.52	4.71	4.85
Production at Current prices (In Rs. crores)	28060	32600	35000	41620	50520
Employment (In lakh No)	71.0	75.0	79.0	84.15	90.00
Investment (Rs. in crores)	5850	6280	6800	7360	8380
Exports (Rs. in crores)	1643	2070	2094	2350	N.A.

Source : Development Commission(Small Scale Industry)Ministry, of
industry Government of India, New Delhi.

The share of village and small industries sector and modern small scale industries is 50 and 33 per cent in the total industrial production respectively.¹⁴ 84 lakh persons were provided employment by small scale industries upto 1983-84.¹⁵

Over 24 per cent of the total value of exports in 1982-83 was from small scale industries.¹⁶ Small scale factory establishments accounted for 5 per cent of the total fixed capital of all the factories, provided employment to 35 per cent of the total employment in factory sectors; held a share of 22 per cent of the total output and 17 per cent of the value added by manufacture.¹⁷

At present small scale industries are engaged in producing nearly 5000 products of different variety which range from simple consumer goods to high precision items.¹⁸ It has achieved quite a competence, quantity and quality wise, in manufacturing of certain items which has been realized by government also. Government has recognised this competence and expertise by reserving nearly 872 items for exclusive production by small scale industries. This list is growing continuously and being updated every year.

DEFINITION OF SMALL SCALE INDUSTRIES

The Development of small scale industries has led not only to the self-sufficiency in production of consumer goods but also has been found necessary for creating employment opportunities in the country. Therefore, to boost up their development the government must give all sort of help to them. But before taking any policy decision about growth of small scale industries

it becomes logical for the government to demarcate the difference between big and small industries. In other words, the small scale industry has to be defined and given a proper shape through words. Once the parameters for deciding the nature to assist the needy industry can be put into action more easily.

The need to define a small scale industry was first felt in 1950s; and in 1955 the Small Scale Industry Board made first attempt of demarcating small scale industries from others on the basis of number of persons employed in the industry plus the capital investment made in it. The first working definition was, a unit employing 50 persons utilising power tools or a unit employing 100 persons without utilizing power tools with capital assets not exceeding the limit of Rs. 0.5 million in either cases should be classified as small scale industry.¹⁹

In 1960 this definition was simplified and the employment criterion was abolished altogether. The new definition was in terms of investment made in plants and machinery (i.e. fixed investment); the new definition was that a unit in which the gross investment in terms of plant and machinery does not exceed a limit of Rs. 0.5 million will be considered as small scale industry.²⁰ There after the criterion has remained same but government has increased the limit of capital investment gradually to counter the effect of price escalation.

In 1975 the ceiling limit of investment was raised from Rs.7.5 lakh to Rs. 10 lakhs. In 1980 it was raised to Rs.20.0

lakhs²¹ and in 1985 it was further raised to Rs. 35 lakhs.²² Thus at the moment industries having a fixed investment of Rs. 35 lakhs would be treated as small scale industries. This definition has been of considerable significance because it varified the government intention to bring more and more units under the umbrella of small scale industry so that these too could enjoy the concessions and benefits bestowed upon small scale industries to promote their growth.

GOVERNMENT POLICIES AND FACILITIES FOR DEVELOPMENT OF SMALL INDUSTRIES

With the announcement of Industrial Policy Resolution of 1956 a concrete shape has been given to the development programme of small scale industries. The emphasis is on developing the small scale sector in such a way that it grows self supporting and in the long run should take up production of sophisticated items, using its own design and expertise. In a way its growth should be parallel to the growth of big industries with a difference that socio-economic benefits especially associated with small scale industries are not lost. So the first and foremost job of the government was to remove all the handicaps of the small scale industries, be it a financial problem, management problem, supply of raw material

or marketing. In 1980 the industrial policy statement gave a definite direction to the growth of small scale industries so as to make it a complementary function of large industry. Putting it in other words, though the growth of small scale industries in to be created as a special feature of government policies it should to be out of step with big industries. The growth of this should be mutually beneficial and harmonious.

Five Year Plans have also given due emphasis on the development of small scale sector recognising its potential of generating large scale employment at comparatively low investment. Generous fiscal allocations and sustained efforts during the Plans have borne trust and this has encouraged the Planning Commission to release more funds in successive Plans which is indicated by following data:

Table 2 : Allocation of Funds to Small Scale Sector during five year Plans.

Plan	Allocation(Rs.in crores)
Firs Plan	5.20
Second Plan	56.00
Third plan	113.06
Annual Plan	53.48
Fourth Plant	96.16
Fifth Plan	221.74
Annual Plan	194.81
Sixth Plan	616.10

Source : Small Scale Industries in India, Policies-Programme and Institutional support, Development Commissioner (Small Scale Industries) Ministry of Industry, Govt,

In order to achieve high growth level in small industries as per direction of industrial policy resolution and successive five year plans a large number of agencies have been set up which provides consulting services at all the levels of industrial functioning. These agencies have been set up at central as well as state levels. Although the growth of small industry is a state affair, all the small industries face some common problems which percolate beyond the state and regional borders. In order to solve such problems at All India level for formulating uniform programmes related to small scale industries, an apex body has been created at central level. Small Industries Development Organisation (SIDO: 1954) is a premier organisation which is engaged in formulation and implementation of various development programmes for small industries all over India. It also controls and guides the development process so that a uniform pattern of growth can be achieved. Another of its function is to suggest the possible lines of manufacturing i.e., the product which can be produced under the SSI projects.

It also provides valuable assistance to industries at different levels of operation like purchase of raw material, the incorporation of latest and more efficient machines and also marketing of the product. It provides a comprehensive range of industrial extension services that range from

identification of suitable production projects to the marketing of the products.

To make the policies of SIDO reach the grassroots of SSI, few satellite organisations have also been created, SIDO operates through the network of organisations which include Small Industries Services Institute (SISI), Branch Institutes and Extension Centres. The guidance and assistance of SIDO is being availed of by 2.5 lakh units all over India per year on matters pertaining to technical, economic, managerial and other general problems. Similarly workshops attached to SISI, take up nearly 50,000 challenging jobs per year to train the entrepreneurs in production techniques.²³

Another organisation National Small Industries Corporation (NSIC:1955) has taken up the special task of guiding the entrepreneurs in the field of guiding the machinery and tools. It informs the budding industrialists about the merits and demerits of the machines which are on display and help them in purchasing the one which most suits their plans NSIC also provides machines and equipments on hire purchase basis to entrepreneurs. It assists the units in stores purchasing programmes and imparts training and prototype development facilities.

The development of SSI in a state is the state government responsibility and to discharge their responsibility

with efficiency some state and district level organisations have been set up. These organisations look after the growth of industry at district and state levels. Various state level organisations are given below.

The Directorate of industries is obliged to prepare and develop an infrastructure, make provision and allocation of scarce raw materials whether it is indigenous or imported, confirms the import requirements and organise industrial Corporation.

State Small Industries Development Cooperation have been set up in nearly all the States. Their main function is the development of Industrial Estates and Industrial areas. Besides, they look after the marketing activities such as location and creation of new market including the export of goods.

District Industries Centres have been set up to organise such industrial activity in rural and semi-urban areas which keeps employment (in numbers) investment ratio very high i.e., highly labour intensive industries. The basic aim is to let the rural craftsman live in their native places and make a decent earning instead of the mass migration to cities or being called landless labourers.

Even after setting up all sorts of centres and institutes at various levels, the growth momentum of SSI would not have shown this impressive trend, but for some remarkable policy decisions by government of India, which have been responsible for this momentum. Most of the decisions pertain to fiscal policy which ensures a smooth and easy availability of funds and finances along with a pricing structure like differential excise structure which provides an edge to items produced by SSI, in prices, over similar items being produced by big sector.

One of the most fundamental requirement for promotion of SSI has been the need of reserving certain category of items to be produced exclusively by SSI, so that it is assured of business. On the basis of economic viability and technical feasibility a few items have been reserved to be produced solely by SSI. A review of the reserved items has shown that the reservation policy has made positive contribution to the growth of small scale units. Every year the list of reserved items is revised and on 31st March 1984, the number of reserved item stood at 872.²⁴

By according the small scale sector the status of priority sector, government has assured a continuous flow of funds, at liberal conditions of repayment, from various

financial institutions, RBI too, has advised commercial banks to enhance their credit flow to SSI units and in fact credit flows have increased greatly in recent years. Long and medium term credit facilities are extended by state financial corporation, State Directorate of Industries and scheduled commercial banks. Short term working capital needs are met by commercial banks. To overcome the fears of losses in such an investment by commercial banks, the government of India floated small loans Guarantee Scheme in 1981, replacing the credit Guarantee Scheme promoted by RBI, to share the possible losses.

The government directive to different store purchases, made by all departments of government of India, to give a preference to items produced by SSI has further strengthened its base. Government of India continues to be the largest purchaser of all the SSI goods. By 1983 there were 404 items on the list of Directorate General of Supplies and Disposals (DGS&D) and other government stores to be purchased exclusively from SSI.²⁵ In addition to this all the other goods which have been listed to be produced by SSI (exclusively) are given a price preference upto 15% over similar goods being produced by medium and large scale industries.²⁶ Thus a steady market has been assured to all the entrepreneurs who take up the challenge of operating SSI.

In conformity to the basic aim of removing regional imbalances through industrilization of backward areas, government has offered special subsidies and incentives to all those who are keen to establish their units in such areas. These incentives include financial support at very liberal and easy terms, allocation of land at a very low price, prefential treatment while allocating the raw materials (specially the scarce ones) and liberal imports of machines for those who have small scale units in backward areas.

To popularise the SSI goods abroad, government has taken initiative by providing all the necessary informations regarding the type of goods that can be easily marketed in International market. Many other facilities like training in export marketing and Export Information Services have widened the horizon of sales of SSI goods. Government has set up special councils and boards to look after export activities and some of these are of particular relevance to the small scale sector in handloom, gems, jewellery and leather products.

In addition to these, government has given a relaxation in excise duty for goods from SSI's. This makes the goods highly competitive as far as price is concerned. Another step in boosting the sales of SSI goods is by imposing a special cess on similar goods being produced by large sector.

A CRITIQUE OF GOVERNMENT POLICIES ON SMALL SCALE SECTOR

Due to its immense potential of growth and comparatively low capital investment, the SSI has caught the attention of various government agencies and for the time being enjoys many fruitful decisions of the government designed to promote and protect small scale industries. In fact in the last few years, the growth of small scale industries has been all time high. But all the government enthusiasm and efforts have not been fruitful. There have been instances where government's help has proved to be inadequate, its financial commitments being misquandered and misused. Favouritism and nepotism too has eroded the confidence of many young entrepreneurs. This part of the chapter will deal with the government policies for the development of small scale industries and the problems which contradict and run counter to government policy and commitment.

The very first shortfall of government policy is the shortage of technocrats at the top of many of these agencies which have been established to protect and promote and to help small scale industries grow into profit making units. No doubt, these agencies have done a laudable job for many struggling small scale units but due to their recent establishment and relatively short experience plus lack of proper strength of technocrats, these agencies have been a limited success.²⁷

Secondly, since the official definition of small scale industries takes into account only the money invested in plant and machinery and avoids factors like turnover, utilisation of funds, the sales accord with big Indian and foreign firms-the definition becomes misleading and can be easily exploited. With the increase in ceiling to 35 lacs of rupees over last ten years the chance of misuse of this definition has increased greatly.²⁹ The small scale industries which are at the top of the list (investment wise) claiming all sorts of incentives of being small, are more often open or disguised subsidiaries of some big industry. The ownership link must be ascertained before giving the go ahead signal to small scale industries, especially for ones which have sought the highest amount of loan or which are working at ceiling line. In 1973-74 a national census on small scale industries was carried out by the Development Commissioner of small scale industries. The report released in 1976 makes an interesting study and poses a serious question to government's recent hike in ceiling to 35 lacs rupees for it. The interesting revelation is that-the study or census pointed that during that period of 1973-74 there were just 3% of units which were given loan or rather which had a total investment in plant and machinery to the tune of Rs. 3 lacs or above the then ceiling limits³⁰ indicating how short the government resources were. The logical conclusion should have been to keep the ceiling limit low and disburse,

whatever the resources are, among a greater number of entrepreneurs.³¹ But this conclusion has been side stepped. This hike in ceilings is thus a disturbing aspect about governments policy and its vow to dissolve the disparities and class conflicts comes under a cloud. If the census findings had been made the base and dissolving disparities were the spirits then the government policy should have been of providing a large number of entrepreneurs with small loans keeping in view its resource limitations. The recent hike will not only favour persons, entrepreneurs from upper strata but also lesser number of persons will be benefited.

Thus, there should not be same ceiling for all types of industries, since resources requirements vary from one type of industry to another. The small scale industries will be better off if these are segregaegated into different categories each with a specific ceiling as per requirements. This differential ceiling system would give the government more resources in hand.

The phenomenon of so many SSI going sick is also a serious concern. The reason could be many but one common denominator is the unplanned growth of the industry. The flood of small scale units that have cropped up recently has not taken the developmental needs of this country in view. Result is piling up of non-saleable goods followed by closure of many manufacturing units, due to weak financial base.

Thirdly, governments liberal policies of providing financial help in the form of loans and machinery has attracted many persons at times with non-feasible project³² and unrealistic figures regarding production, marketing and profits. Although on paper they look lucrative, provision of loans for such projects has cost many financial institutions dearly, as such projects ran into trouble right from beginning and the money could not be recovered from borrowers. This sort of misuse of capital either deliberately or unintentionally has blocked a huge amount of resources which may have to be written off ultimately, a step our country could ill afford. It is therefore advised that technical review of all the project should be assigned to the persons who are well versed and sound in such assesment. The various facilities specially in the form of finance and machinery should be provided on the strength of projects feasibility rather than borrowers financial background and assets which can be easily manipulated. In short, the genuine entrepreneurs should be selected using more rigorous exercise and aid should be dispensed only after ensuring that project is not feasible on paper but practically too.

Another tedious problem is marketing of products produced by small scale industries. To succeed in marketing needs two basic requisites - market forecasting and regular contact with customers, routine as well as potential. Unfortunately, limited resources and inability to hire trained

hands in marketing management do not keep the entrepreneurs fully informed about trends of market. Market problems invariably leads to sickness in units and ultimate mortality of many small scale units.

Here again government has failed to put forward a workable solution beyond the scheme of giving preferential treatment to small scale industries products for DGS and D and other governmental purchases, which may keep a particular industry going but the chance of product and quality improvement in production techniques is not found in this sector. The protection of government should be there but only for a limited period of time and during that time, the particular small industry should also be introduced into open market through government agencies and government sponsored programmes. And here lies the crux of the problem: It is difficult for a small unit to operate in a big market singly. It would be a very appropriate idea if the small scale units engaged in production of similar items should form a consortium or co-operatives and should enter into market under a common 'brand name'.

Government can chip in with the job of sponsoring these co-operatives to consumers. The government agencies can also help in assessing the demand and futuristic products, preference in the eyes of consumers which should then be used to direct the efforts of consortium or co-operatives towards a useful

productivity.³³ Working on a demand forecast, the producers get ample time to manage their affairs right from raw materials to marketing.

Electricity, or rather shortage of it continues to be the biggest factor responsible for sending many industries into "Red".³⁴ Its necessity to industry need not be elaborated here but shortage of it should start many debates about governments inability to provide sufficient amount of it. The conclusion is that growth of power sector could not keep pace with growth rate of industries. With licences for industries being issued indiscriminately and without trying to balance the output and consumption equation, such a state was always round the corner. But the actual problem is that hitherto, government persued a biased policy against growth of proper energy resources. Moreover, conservation of energy has never been a high priority article on governments policy paper. Both of these have led to this situation of uncertain power supply.

Right now, government can help the matters a bit by identifying the industries which continue to be the power guzzling one and these should be encouraged, to bring down the consumption, through some incentives. Similarly, technologies which are not too-power dependent should be put into use specially in villages and remote areas which are yet to be on the electricity map of the country.

14. Government of India, Ministry of Industry and Company Affairs, Development Commissioner (Small Scale Industries), "Small Scale Industries in India-Facts and Figures." (NEW DELHI: 1985) p. 1
15. Idem.
16. Idem.
17. Idem.
18. Government of India, Ministry of Industry, Development commissioner (Small Scale Industries), Small Scale Industries in India, Policies Programmes and Institutional Support, (NEW DELHI : 1983) P.8.
19. H.K. Bhattacharya, Changing Concept of Small Scale Industries in India, Yojana 16-30 April 1982, P. 7.
20. National Small Industries Corporation, "Schemes and Progress 1960-61" (New Delhi: 1961) PP. 8-9.
21. Bhattacharya, op. cit., p.8.
22. Prabhat Pattnaik, "Some Implications of Economic Strategy Underlying 1985-86 Budget" Economic and Political Weekly, Vol. XX, No. 16, April 20, 1985, p.699.
23. Small Scale Industries in India, Policies - Programmes and Institutional Support, op. cit., p. 18
24. Small Scale Industries in India - Facts and Figures, Op. Cit., p. 10.
25. Small Scale Industries in India, Policies-Programmes and Institutional Support, Op. Cit., p. 26.

26. Ibid., p. 27.
27. S.J. Rele, "Small Scale Sector barriers to growth,"
Eastern Economist, August 17, 1979, p. 353.
28. Girish Misra, "Big Business Penetration in Small Sector"
Link Feb. 26, 1984 p.
29. Patnaik, Loc. Cit.
30. M. Sahney, Upward Revision of Small Industry Definition,
Financial Express, September, 3, 1980, p.3.
31. Idem.
32. Y.R. Singh, Small Sector: Some Issues, Financial Express,
Aug. 20, 1980, p. 5.
33. Idem.
34. Mankumar Sen, How Vital is the Small Scale Sector?
Capital. Annual 1983, p.93.

CHAPTER - II

SMALL SCALE INDUSTRIES IN UTTAR PRADESH

An Economic Profile of Uttar Pradesh

Uttar pradesh is the most populous constituent of India, which dominates the map of the country with a population of 11.9 million (16% of the country's total population) and a size area of 294 thousands square kms¹ (3.4 per cent of the country's total area). The state has been divided into five regions on the basis of geographical and economic factors for the purpose of planning. These are western, central, eastern, bundelkhand and hilly region. There are sharp inter-regional and intraregional disparities within the State. Western and Central are comparatively developed regions of the State due to considerably higher level of agricultural and industrial development. In the Central region the intensity of cropping is far below the State average. But the medium and large scale industries are mainly concentrated in this region. Bundelkhand and hilly regions have been recognised by the state government as relatively backward due to low productivity, low level of industrial development, greater frequency of floods and droughts etc.

On the whole, the entire state is economically backward with a large segment of its population (41.8 per cent)² living below poverty line. The economy of the state is overwhelming

agrarian with a weak industrial base. 74.5%³ of total workers of the state are engaged in agricultural activities and the contribution of agricultural and allied sector in the states income is 50.77 per cent. Thus the state continuous to have a heavy reliance on agriculture for its growth and sustenance of over the three fourth of its population. But even within agriculture more attention has been paid to traditionally better yield crops and more productive regions for a long period of time. Therefore the diversification of agriculture and removal of disparity in different regions can hardly be over emphasized. The agricultural development of the state has been accelerated mainly by the western region of the state. In fact the slow growth has pulled the overall growth rate down. The Draft Sixth Five Year Plan for the state identifies the uneven agricultural growth with among different regions" among the factors responsible for the relative lag in the growth rate of the state economy.⁴

The growth rate of the states income during the each plan has been lower than the country's average till the end of the fourth plan. During the fifth and sixth five year plan the state achieved a growth rate higher than the national average. The growth rate worked out for U.P. and India during FYPs, based on National Domestic Product at constant prices (year 1970-71) are presented in the following table.

Table - 3

Showing the growth rate of Indian and Uttar Pradesh
during Five year Plans

Plan	India	U.P.
Ist	3.4	1.09
IIInd	4.0	1.8
IIIrd	2.2	1.6
Annual Plan	4.0	0.3
IVth	3.3	2.3
Vth	5.2	5.7
Vith	4.8	6.0

Source : Draft Seventh Five Year Plan 1980-85, Volume I,
Planning Department, Government of Uttar Pradesh, p.40.

In terms of overall indicators of the level of economic development income per capita, U.P. has receded much below the national average. According to the National and State Income estimates the per capital income of India in 1982-83 as Rs. 712 while in U.P. the average per capital income was Rs. 529 during the same period.⁵ Therefore, leaving a gap of 25.7 per cent between national and state average per capita income which reflects the backwardness of the state's economy.

The Draft Sixth Plan 1980-85 of the states that among the basic reasons for the situation of backwardness in which the state finds itself today has been the historic factors of "low per capita public capital sector plan outlay and per capita central assistance and adverse capital deposit ratio"⁶.

A low credit deposit ratio implies that all the savings mobilised in the state are not fully utilised for the development of the state economy. It also reflects the low level of development and therefore, low absorptive capacity of the state's economy. Plan allocation indicates the capacity of the states to insugrate development recently. It implies the programmes for initiating and accelerating development on a planned basis. In U.P. the per capita plan outlay has been significantly lower than the nation's average during each plan period.

Table - 4

Showing the National and State average of per capita plan outlay and the rank of Uttar Pradesh During Five Year Plan

Plan	National Average of per capita plan outlays	State's per capita plan outlay	Rank of the State
Ist	38	25	13
IIInd	51	32	15
IIIrd	92	72	16
Annual Plan	61	53	16
IVth	142	132	14
Vth	338	277	14
Vith	684	559	21

Source : Draft Seventh Five Year Plan 1980-85, Volume I,
Planning Department, Government of Uttar Pradesh.

Since U.P. has about 17% of population of the country even a sizable amount would turn out to be rather small on as per capita basis, though large shares of total allocation have been needed, U.P. has received less than what could be considered as proportionate share in national funds.

These factors have been basically responsible for the economic backwardness of the state. This can be cured only through structural changes in economic activities. Agriculture cannot sustain the economy for long and cannot provide enormous opportunities for employment because agricultural productivity has its own limits and cannot be raised beyond a level.⁷ Therefore, the diversification of economic activities other than agriculture is necessary. Growth of manufacturing activities have to be boosted up so as to increase the state's income on one hand and provide employment on the other.

Though the economy of the state is largely agrarian and receiving governments utmost attention, U.P. has a high potency for industrial development. While significant achievements have been registered in the last decade in the area of agriculture, U.P. is perceived as industrially backward among the state.

Industrialization in its very notion is a function of many variables viz., finance, land values, supply of raw

materials, transport facilities, power supply etc. These variables are so important that without their proper availability industrial development can not be imagined. Uttar Pradesh does not possess the necessary infrastructure in an appropriate quantity. Inadequate investment in the earlier plans has certainly been the main reason of halting industrial development.⁸ Besides the share of industrial sector out of total state plan outlay has been considerably lower in all the five year plans. According to 1981 census 9.1 per cent of the total main workers were engaged in industrial activities as compared to national level of 11.3 per cent. Among the large and medium industries of the state namely, sugar, cement vanaspati and textiles are the important industries. Besides engineering, electronics and chemical industries are the up coming industries of the state.

SMALL SCALE SECTOR

Small scale industries have a wide scope in Uttar Pradesh. Because of the lack of capital, high unemployment and under employment. Small scale sector is the most suitable sector for its economy. These industries have to play a pivotal role in creating relatively more job opportunities with less capital than the large scale industries. Moreover, these industries generally use the locally available raw materials.

Besides the whole state except a few towns in western and central Uttar Pradesh is industrially backward; specially Bundelkhand hilly region and eastern U.P. are far away from a touch of industrial activities. And this stagnation and inactivity can be cured only with the help of the small scale industries. It will expand employment, production and will help in a more balanced regional development of the state.

Lack of enterprising spirit is a major reason of the economic backwardness of the state and the growth of small scale industries will help is diversification of entrepreneur and managerial skills. Since the economy of the State depend on agriculture, village and small scale industries can play a vital role in diversifying the economic structure of the state due to the advantages associated with him.

Keeping in view the over pressurised land, stagnation and backwardness of the state more and more emphasis has been given on the development of village and small scale industries. In 1960 there were hardly 6000 small units registered with the directorate.⁹ Now at present, the small scale units have increased to 95847 (in 1983-84) The following table indicates the position of small scale industries in the state since 1980-81.

Table - 5

Growth of Small Scale Sector in U.P. Since 1980-81

Year	No. of units	Estimated production	Estimated Employment
1980-81	55,896	1,076.85	613813
1981-82	68,426	1,318.42	691145
1982-83	82,037	1,580.00	775194
1983-84	95,847	1,847.00	850149
1984-85	1,08,847	2,100.00	920149

SOURCE : Draft Sixth Five Year Plan, 1980-85, Planning Department, Government of Uttar Pradesh, P. 353.

For providing infrastructural facilities and growth of small scale industries in a planned way 80 industrial states have been established so far by the state government.¹⁰ It will help in the development of the small scale sector specially in the industrially backward areas. Self employment programmes were started during 1983-84 for providing financial assistance to educated unemployed persons.

U.P. Financial Corporation(1954) provides financial assistance to the samll industries and UP small Industries Corporation(1958) deals with the raw material, technical and marketing problems of the samll scale sector. Under District Industries centre scheme small scale industries are provided

per investment, investment and post investment requirements. In short a host of schemes have been started in the state to encourage the small sector.

In spite of all these facilities small scale sector faces a number of problems such as lack of entrepreneurship in the state, shortage of raw material, credit facilities, transport facilities, obsolete technology and domination of traditional industries as stated in Vth Plan (1980-85), "Inability to attain the requisite momentum in respect of modern industries is among the basic factors responsible for the industrial backwardness of the state."¹¹

The importance of small sector is very obvious. For a rapid growth of the state's economy, a more balanced regional development of the state and as an integral of the multi-dimensional approach to the industrial development small scale sector should be developed along with the large and medium industries. The state government should try to break these barriers and hurdles present in the structure of the economy so that a more balanced regional development of the state is ensured. The state government should adopt a more dynamic and growth oriented approach to expand the small scale sector in the state so as to push up the economy of the state.

R E F E R E N C E S

1. Government of Uttar Pradesh, Planning Department,
Draft Seventh Five Year Plan, 1985-90, Volume I, p.1.
2. Ibid, p. 50.
3. Ibid, p. 48.
4. Government of Uttar Pradesh, Planning Department, Draft Sixth Five Year Plan, 1980-85, p. 47.
5. Draft Seventh Five Year Plan, op. cit., p. 40
6. Draft Sixth Five year Plan, Op. cit., p. 47.
7. K. Shaida, The Industrial Sector of U.P. Economy,
Yojana - 1-15 March 1982, p. 30.
8. Draft Seventh Five Year Plan, op. cit., p. 351
9. B. Kumar, Growth of Small Units, Economic Times, 18 Dec.
1981, P. 4.
10. Draft Seventh Five Year plan, Op. Cit. P. 360.
11. Draft Sixth Five Year Plan, op. cit., p. 47.

CHPATER IV

STRUCTURE OF ALIGARH LOCK INDUSTRY

The present status of lock **industry** appears quite impressive which is indicated by the fact that there are around three thousand units employing nearly one lakh people with an annual turnover of thirty crores¹. The actual number of astisans and direct labour involved in this trade is sixty thousand and forty thousand are involved indirectly supplies of raw material, sales agents, commission agents, packaging and forwarding agents, advertisement agents etc.². The industry has gained versatality by using both hand used techniques and machine processes for manufacturing locks. The range of locks is also very large from iron and steel pad locks, zinc alloy, die cast pad locks, brief case, cycle and automobile locks, portfolio and awer locks.

Despite the sluggishness towards **improvement** in design and cost effective measures, the Aligarh locks enjoy a steady market within the country with about eighty per cent share in the national market.³ It has gained a reputation of being sturdy in nature though not very attractive in design.

1. MANAGERIAL SET-UP

Application of special management functions and techniques like personnel, administration, finance, marketing and

purchase etc do not find much scope as far as the lock industry of Aligarh is concerned. Generally, it is more of a one man show where the owner of the unit takes care of all the management from the raw material purchase to ultimate disposal of produced goods. They may hire some assistants to look after production, account, selling etc, but then these hired personnels are themselves rarely enlightened with any special techniques and innovative ideas. The industry works on the wisdom acquired over the years by owners and skilled labourers. The table below gives an idea of the managerial studies in the year 1980, 1982 and 1984.

Table 6

Managerial Set-up of the Units Surveyed

No of Units surveyed	Performance year	Nature of Management		
		Owners as managers	Hired Hands Experienced but without qualifications	Qualified Managers
50	1980	40 (80%)	9 (18%)	1 (2%)
50	1982	39 (78%)	10 (20%)	1 (2%)
50	1984	36 (72%)	12 (24%)	2 (4%)

It is clear from the table that the owners continue to be the managers in most of the units (72-80%). The hired

personnels without any proper qualification comprises(18-24%), while hired trained personnels amount to just(2-4%).The tendency or trend is towards recruitment of outsiders but the rate is very slow. The power to take decisions still does not rest with these hired departmental incharges, the owners take all the decisions regarding different activities in the firms.

In the case of household units, the individual family or group of families are engaged in work and rarely hire labour from outside. Out of fifty units taken for survey, only 22 units (44%) have employed hired labour from outside for working in their workshops. These units or workshops have an informal atmosphere around themselves, at times first one room one shed arrangement and a close relationship between workers and owners.

2. MANUFACTURING SET-UP

It is rare that a unit purchases raw material and churnout a complete lock by itself. The manufacturing of lock is divided into different processes and each one is carried out on the principle of division of labour. The common practice is that the small factories pruchase raw material and make some components in the factory premises. For making the other components or porcesses they distribute the raw material among different artisans who preform their work at their own workshops.

Thus, if raw material needs ten or more different operations before it is finally given the final shape there may be ten or more units involved in completing that cycle. The following table shows the nature of the firms surveyed and percentage of units falling in the group. The percentages are given in the brackets.

Table 7

Manufacturing Set-up of the Units Surveyed

(Small Factories)

No. of Units Surveyed	Performance year	Nature of Units engaged in		
		Complete Manufacture of locks	Less than 50% on contract ba- sis	More than 50% on contract basis
50	1980	Nil	20 (40%)	30 (60%)
50	1982	Nil	18 (36%)	32 (61%)
50	1984	Nil	15 (30%)	35 (62.5%)

The number of industries getting more than 50 per cent parts manufactured on contract basis from household units are 30 to 35 (60-70%). It points towards the fact that a considerable portion of the industrial units is not keen to

install machinery and invest capital on mechanization. The lock industry stays labour intensive even now.

Household Units :

While some household units work on behalf of the small factories some have an independent existence of their own. The following table shows the per centage of household units working for small factories and the units manufacturing parts independently.

Table 8

Manufacturing Set-up of househole and Cottage

Units Surveyed

No. of Unit Surveyed	Study year	<u>Number of Units Engaged</u>	
		Manufacturing parts on behalf of S.S.I.	Manufacturing parts indepen- dently
50	1984	37 (74%)	13 (26%)

(The data is available for 1984 only as household units do not maintain exact data for previous years).

The table indicates that most of the household industries cater to the demand of small factories by manufacturing parts for them on contract basis.

These artisans get the raw material from the small factories but use their own tools and implements. Their workshops are mostly adjacent to their residence and generally the family members including women and children perform different operations to make that particular component. These household or cottage industries have no identity of their own so far as the finished product is concerned. The units to whom these artisans supply these components get the locks assembled and put their own brand at the finished product.

Some of these household units which have an independent existence with respect to sale of goods. Purchase the raw material on their own. These units are not bound or obliged to supply their product to one particular buyer. There may be a bidding for the produce that whoever is willing to pay more will be supplied the material. In such cases the producer may sell its product to first one buyer depending upon the amount the buyer is ready to pay. But generally these artisans have weaker bidding power due to their poor financial position.

Tools and Machines :

As the entire structure of the lock industry of Aligarh is based on cottage, tiny and small scale basis,

the reliance is still on traditional manual appliances and labour intensive and primitive processes. Only a few firm have put to use the technological gains available in the form of machines and power driven implements.

Table showing the percentage of the units using power driven machinery. The percentage have been indicated in the brackets.

Table 9

Power Driven Machinery used by Units Surveyed

No. of Units	Study year	Number of Industries with	
		50% or more Capital investment in power driven machinery	50% less than 50% capital invested in power driven machinery
50	1980	18 (36%)	32 (64%)
50	1982	18 (36%)	32 (64%)
50	1984	20 (40%)	30 (60%)

The machines etc. have been shunned with the idea of saving capital and also because these will need skilled and therefore costlier workers. The age old appliances can be used without much problem by unskilled or semi-skilled workers.

Another factor that goes against the machinery is the unreliability of power supply. The idle tools not only cause a reduced production but the resultant accumulation of interest on loan can upset the balance sheet of the firm. Since most of the units are run on family basis and trade has been passed on from generations to generations, unpaid family labour (in the form of family members) is available that can do with simple tools instead of advanced machinery. Thus most of the small units survive even with incredibly small amount of capital.

RAW MATERIAL

Two types of raw materials are being used in the production of locks ferrous and non ferrous. In the small factories the requirements of ferrous metal are met by the scrap of various car factories namely, Hindustan Motors, Premier, Standard etc. Besides, they also get the material from Bajaj Scooters, TELCO and various ordinance factories. By using the scrap of the above mentioned factories manufacturies are able to keep the cost of production lower than if they had to buy iron sheets which are much more costlier than scrap.

For non-ferrous metal generally manufacturers use the melted brass of unused brass utensels but it is not a standard specification and affects the quality of locks. The brass scrap of the ordinance factories is also used by lock manufacturies. Besides, Minerals and Metal Trading Corporation (MMTC),

imports and supplies the non-ferrous metal to the lock manufacturies.

Raw materials are also available in the local markets. The stockists with sufficient financial resources buy the raw materials in bulk and supply them to the manufacturers. Generally, small artisans buy raw material from these stockists for their household units. This is so because most of these artisans buy raw materials in small quantities and have limited financial resources. They cannot approach the distant markets. Even in the small factories a considerable part of the raw materials ahas been bought through local markets.

The following table shows the share of local and national market in providing raw material to the lock manufacturers with surveyed.

Table 10

Share of National and Local raw Material Markets

Number of Units Surveyed	Study year	<u>Number of manufacturers depend on</u>		
		Local Market for raw material	National Market	Both the Markets
50	1980	24 (48%)	-	26 (52%)
50	1982	20 (40%)	3 (6%)	27 (54%)
50	1984	19 (30.5%)	2 (4%)	29 (59.5%)

In spite of harbouring the biggest lock industry of the country, the city lacks a proper distribution network of raw materials. Minerals and Metal Trading Corporation has no regular arrangement for the supply of raw materials rates are also very high though the corporation is a government institution.

In the absence of availability of suitable raw materials in the local market, the manufacturers approach the far off markets which includes transportation cost and other complexities. Even those manufacturers who get a quote allotted to them have to go to other cities to collect the raw materials as there is no arrangement of government depot for their distribution. Besides, high fluctuations have been found in the prices of raw materials which influence the production planning of the firm.

Thus, the manufacturers have a legitimate complaint and have reasons to protest against the uneven and erratic supply of raw material, erratic in price, erratic in quantity and quality and supply depot situated at distant places, all adding up to enhanced selling price of finished goods. While the big units could still save themselves from going broke by using proper inventory controls (which they can afford) these small lock units cannot afford to think of inventory.

The money blocked in huge inventory could upset the overall performance of units. So many small units have to purchase raw materials from sources other than government which results in higher prices and lower quality. This would obviously compel the smaller unit to start there production in wrong footing and end up with a non-competitive product.

The only solution which can be suited is that government should establish a local depot capable of supplying raw material of right quality and aggregate quality at reasonable prices. The government should also create a super buffer especially for critical inputs, ensuring security against fluctuation in prices and standardise product of reliable quality.

Production & Planning :

It has been observed that most of the production is carried out without proper and optimum utilisation of men, material, money, and machinery. ^{Production} is not planned properly, especially due to the fluctuations in the availability of raw materials. Production is taken up on a day-to-day basis and controls over material flow is not very restrictive. There is no scientific method or operational analysis employed to estimate the capacity of units. Targets are

only set by approximation and availability of raw material in some small factories but most of the factories produce only after getting orders from their customers.

The cost structure of the units surveyed has been shown with the help of the table given below.

Table 11
Cost Structure of the Units Surveyed

<u>Items</u>	<u>Percentage</u>
1. Tools and Implements	15%
2. Raw Material	50%
3. Labour	25%
4. Marketing	10%

It indicates that the largest proportion has been spent on the purchase of raw material and the percentage spent on labour is more than the percentage spent on tools and implements. Marketing has only 10% share of the total cost structure.

In the case of household units also a major proportion is spent on the purchase of raw materials. These artisan spend a negligible amount on tools and implements and on labour due to the fact that mostly family labour is engaged in household units and they was earthy and premitive tools.

Even for marketing they do not have to spend much. As stated earlier, they manufacture parts of locks on behalf of the small factories on they personally sell their product in the market.

EXPORTS :

Though Aligarh Lock Industry contribute eighty percent of turnover of Indian Lock Industry, the share of exports turnover remained negligible. While Indian market has absorbed the Aligarh locks, to foreign markets it remains a distant cry because of poor techniques in manufacturing processes, poor marketing efforts, inadequate knowledge about export procedure and inability to develop a common platform for pressurizing the government towards export promotion of locks through trade pact.

The main factor behind this decline in exports is the failure of assurance of quality and non fulfilment of delivery schedule. The statistical data on export promotion speak for themselves.

Table 12

Exports of Lock Industry of Aligarh

<u>Year</u>	<u>Exports</u> (Rs. in lakhs)
1980-81	68.29
1981-82	72.00
1982-83	65.00
1983-84	58.00

Source : President All India Lock Manufacture Association

Besides, most of the entrepreneurs are unaware of the export techniques (opportunities) or find governmental regulations too discouraging to think in terms of exporting their produce. Inexperience and ignorance of various ^v Vinstas, procedures and documentation involved for exports has created a defeatist attitude towards exports.

R E F E R E N C E S

1. Draft Seventh Five Year Plan, op. cit., p. 356.
2. Pilot Project for Improving Productivity of Lock Manufacturing Units of Aligarh 1983, New Delhi: National Productivity Council, p. 5.
3. Souvenir, Seminar on Locks, March 21, 1982.

CHAPTER V

FINANCE AND MARKETING

(A) Finance :

Capital is an essential factor in all the Industries. It finds its usage in fixed assets like building and land, machinery and implements and other field provisions. Besides, a part of capital (working capital) goes into day-to-day working such as purchase of raw materials, salary, various bills such as power, water etc., meeting the manufacturing costs and bridging the gap between the primary stage and final disposal of products. Capital is also required when modernization of plant envisaged in order to absorb the latest technology when the plant capacity is being increased and when product design is changed and being put under testing. Thus the need for capital is always felt right from the start of factory, at every step from raw material purchase to packaging and forwarding the product.

Lock manufacturing units of Aligarh come under small scale sector and tiny units. Due to simple manufacturing tools and small working space the fixed investment tend to be little in comparison to the working capital which keeps increasing due to the inflationary tendencies in the prices of raw material raising power tariff and salaries.

To meet these cost escalations and other requirements the firm have to depend upon borrowing and loans. The main financial resources available for lock manufacturers of Aligarh are indigenous bankers, commercial banks and government institutions. Besides, manufacturers also finance their units with their personal investment and borrowing from friends and relatives. Indigenous bankers consist of mahajans, shroffs, wholesalers, shopkeepers etc, who, in other words, are the capitalists interested in the work of artisans as manufacturers or traders. These private money lenders advance short term loans against pronotes and hundis. They also advance money through cheque system, in which the shopkeeper draws a post dated cheque in favour of the manufacturing units from whom he has to purchase the produce. The cheque is mortgaged to the private money lenders and the manufacturers recieve the amount of the cheque. The money lenders receive interest and on the date of maturity, it is encashed by the drawer. Private money lenders also advance money against transport receipts and against tangible assets like building, ornaments etc. These indigenous bankers charge a high rate of interest because of the risk involved in lending money to the lock manufacturers through the terms are more conveninet than those of the commercial banks.

There are a number of commercial banks in Aligarh which advance money to the manufacturers and traders for the purpose

of purchasing raw materials, plants and machinery. The following Table shows the loans sanctioned to different small scale industries (which include lock industries) by the commercial banks of Aligarh 1985 till June 1985.

Table 13
Loans Sanctioned by Commercial Banks to Small
Scale Industries of Aligarh
District

Name of the Bank	Target	Amount in Thousand
1. Canara Bank	12,200	6,115
2. State bank of India	17,850	15,218
3. Central Bank of India	7,900	365
4. Punjab National Bank	3,250	2,055
5. Bank of India	400	235
6. Bank of Baroda	1,000	600
7. Dena Bank	800	40
8. United Commercial Bank	650	25
9. Union Bank of India	400	652
10. Syndicate bank	500	400
11. Indian Overseas Bank	600	335
12. Indian Bank	900	175
13. Allahabad Bank	4,450	809
14. Vijaya Bank	400	758
15. New Bank of India	800	275
16. Punjab and Sind Bank	250	-

17. Oriental Bank of Commerce	1,800	627
18. Hindustan Commercial Bank	500	-
19. Banaras State Bank	300	50
20. Bareilly Cooperative Bank	600	-
21. Aligarh Gramin Bank	5,800	448
22. District Cooperative Bank	1,150	113

Sources : Progress Report of Annual Action Plan 1985(Provisional)
of Aligarh Canara Bank.

This table indicates the poor performance of the commercial Banks in providing credit facilities to the small scale sector of the district. No Bank could have achieved the targets. These commercial banks advance loans against the railway or transport receipts and pledge against raw materials and finished or unfinished goods. To help the artisans and tiny units engaged in lock manufacturing a few commercial bank have also extended small loans to various categories of units under different schemes. A sample data from the major commercial bank is as follows :

Table 14

Loans Disbursed to Small Artisans (Rs. in Lakhs)

Bank	No. of beneficiaries assisted	Disbursement	Liability
P.N.B.	400	25.00	20.00
S.B.I.	200	12.00	11.00
C.B.	180	10.00	12.00
	780	47.00	43.00

Source :Lock Industries in Aligarh (U.P.).A Survey with Special Reference to Bank Finance to Lock Artisans/units Engaged in Production of Locks. July,1985,Canara Bank.

The government institutions which provide financial assistance to the small industries of Aligarh are UPFC (Uttar Pradesh Financial Corporation, 1954) which grants loans for fixed assets i.e. land, building, plant and machinery etc. UPSIC (Uttar Pradesh Small Industries Corporation, 1958) which mainly deals with raw materials, marketing etc. and finally there is NSIC (National Small Industry Corporation, 1955) which provides technical and financial assistance to the small scale industries including lock industries.

Since a large number of units of lock industry are run on household basis mostly they cannot provide sufficient guarantees and securities for utilizing the lending facilities of the commercial institutions. These small units are financed through personal investment or by money borrowed from friends or relatives. In the absence of the above mentioned sources, these entrepreneurs have no alternative other than to approach the indigenous bankers, who lend money at high rates of interest and thus a big chunk of manufacturers profit goes to pay the interest leaving them with small amounts of funds for reinvestment into their own enterprise.

Table 15(a & b)

The financial resources of lock units surveyed

a) Small Factories

No. of Industries surveyed	Performance year	Financial assistance from			
		Indigenous Bankers	Commercial Bank	Non-banking financial Institutes	Personal Investments
50	1980	21 (42%)	19 (38%)	3 (6%)	7 (14%)
50	1982	14 (28%)	21 (42%)	5 (10%)	10 (20%)
50	1984	12 (24%)	24 (48%)	6 (12%)	8 (16%)

b) Household Industries

50	1984	32 (64%)	4 (8%)	-	14 (28%)
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These tables indicate that while the small factories with relatively strong position are flourish^uing under official patronage since they get loans from commercial banks easily, the household units still depend upon the private money lenders for meeting their financial requirements. In the case of small factories out of fifty units taken for survey, 19-24 units have been assisted by commercial banks, 12-21 by indigenous

banks and 3-6 by government non-banking financial institutions during 1980 to 1984. But in the case of household industries only 4 units were assisted by commercial banks and 32 units by indigenous bankers during 1984. (In case of these household industries the data are available for 1984 only as these units do not maintain exact data for previous year). Thus a stagnation has come to stay in small entrepreneurs career, while the big and medium houses are flourishing under official patronage which is times, unpremeditated. Thus non-uniformity in disbursement of loans on easy terms has adversely effected the smaller units.

The limitations in Banking Services in this matter are understandable due to stringent laws of loans distribution. Still some leading Banks like State Bank of India, Canara Bank (the lead Bank of Aligarh District) have done commendable job. It is now for government controlled institutions to look into this disparity, taking fresh initiatives and amending present policies to restore some sort of balance in credit facilities.

Another major obstacle towards a proper distribution of funds is the ignorance of the lock manufacturers about the credit facilities available to them and they are also not aware of the agencies concerned with it. In addition, due to lengthy paper work and beauracatic functioning of these institutions causing delay in release of loans discourage many

entrepreneurs from approaching them.

The problem of finance should be handled with great deal of official flexibility in attitude and understanding of needy lock entrepreneurs. The compalin generally made by the entrepreneurs is complicated beuraucratic functioning and paper works involved in obtaining loans from the banks. Therefore the paper work and procedure should be made easy and banks should avoid these lengthy procedures and unnecessary beuraucracy. On behalf of the illiterate artisan paper work can be handled by the officials of DIC or SISI.

(B) MARKETING

Marketing of a product requires a very sound and widely effective net work of sales agents and distribution system backed up by strong advertising techniques. But the above mentioned aggressive and costly techniques cannot be gainfully employed bo lock units of Aligarh due to their financial constraints.

For the purpose of marketing, the industry deals with both private dealers as well as government departments. In case of private dealers the produce is marketed both directly and indirectly. But direct methods have been adopted only by a few leading firms, with an effecient management, under this method the manufacturers advertise their products and

customers directly place an order to the firm or through the representatives of the respective firms. The firms practicing this method are negligible in number.

Generally, the following indirect methods are found in Aligarh lock industry (a) Different firms appoint their travelling agents who secure order from different places and these orders reexecuted by the principal firms (b) The system of selling branches is also found in lock industry. The firms appoint their selling branches in different cities which ultimately sell the produce to the customers. (c) Marketing through wholesalers is also found in the industry. Since they have sufficient financial resources, they purchase the produce in bulk from the manufacturers and sell to the supplies or retailers. They also advance money to the manufacturers and in return they buy their product. Wholesalers also provide loans to the suppliers. There is a long chain of those wholesalers and middlemen in the lock industry. (d) There is also a provision of mail order business under which the firms have to get their products advertised through different media, through personal approach to the customers or by circular letters. The customers place their orders to the manufacturers.

The following table shows the different indirect methods adopted by the units surveyed.

Table 16
Marketing Pattern of the Units Surveyed

Indirect methods of marketing	No. of units	% of units
1. Travelling Agents	20	40%
2. Selling Branches	7	14%
3. Wholesalers	15	30%
4. Mail orders	8	16%
Total	50	100%

The above table indicates that a major proportion of these units (40%) market their product through travelling agents.

Locks from Aligarh are also supplied to the state and central government departments. The requirements of state government are met through contracts inviting competitive quotations through the Directorate of Industries U.P.(Kanpur). A circular of the state government which mentioned the quality, specification, size, quality, period of supply etc is sent to all the members of 'quality marking scheme'. The supplier whose quotations are found lowest of all are given the orders. Before the locks are supplied to the state government

they are inspected by inspectors appointed by the government. If the quality of locks is found appropriate they are marked 'Q' and are supplied to the specific department.

To meet the requirements of Railways local bodies and banks etc. tenders are invited from the lock dealers and suitable tenders are accepted. The dealers have to deposit a small amount in advance as security refundable after the contract is honoured.

The manufacturers with relatively stronger position arrange their own travelling agents and selling branches and also fill the state and central governments tenders. But comparatively smaller units are forced to sell their product to the "Middlemen" or "traders" because of their inability to arrange wide and effective methods of marketing like travelling agents, advertising their products etc. These traders or middlemen sell these products under their own brandname and corner a large amount of profit due to their position of strength. This loss of individuality along with fair amount of profit to small units can be avoided if government encourages the purchasing straight from units rather than from trading firms, as far as government purchases are concerned. District Industries Centre

can do the bidding on behalf of manufacturing units towards the tender of lock purchases on DGS and D, Railways, P[&] and T, Defence and other central departments. The lock industry can be brought under product reservation policy of government, which would reserve the lock manufacturing activity for the SSI only thus restricting the growth of big and medium size units which, due to mass production facilities can undercut the sells of smaller units.

The DIC can promote the sales by displaying the product range in different trade fairs. Also, DIC can become an important guide to interested purchasers by acting as intermediary between entrepreneurs and purchasers. On their own, the young entrepreneurs can set up a marketing network or cooperative basis when the profits are shared equally or proportionally among the producers and the middleman is eliminated.

CHAPTER VI

LABOUR

As stated earlier, such units where the whole work is performed by permanently employed labourers hardly exist in lock industry. A considerable proportion of work has been carried out on contract basis outside the factory. Lock manufacturing involves numerous manufacturing processes and in every process a number of workers are employed. Each process consists of different sub-processes at different places. The labourers who are employed in the units are recruited locally amongst known people and through personal contacts. It has been observed that the factory owners do not face a shortage of labour as it is available in abundance for the industry. There are nearly forty thousand artisans involved in lock manufacturing. Their families have been in this business for ages and therefore it has become an inherent talent of these artisans. In fact, the whole lock industry has been surviving due to the expertise of these artisans.

Around fifty household units covered during the survey were engaged making and processing different lock components. The following table shows the process wise analysis of the units surveyed.

Table 17

Nature of the Household Units Surveyed

Units Engaged in	No. of Units	% of Units
1. Moulding	5	10%
2. Filing and fitting	4	8%
3. Engravers	4	8%
4. Shackle Making	6	12%
5. Body Making	8	16%
6. Key Making	6	12%
7. Galvanising	7	14%
8. Machine polishing	3	6%
9. Hand Polishing	3	6%
10. Assembling	4	8%

Thus, during the survey of a limited portion of household and cottage industries, almost all types of units were covered though small in number.

As these units run on household basis, mostly they are adjacent to the living places of artisans. Children and women also work in these small household units. The division of workers of the firms surveyed according to sex has been shown with the help of the following table.

Table 18

Family and Hired Workers engaged in Household

Units Surveyed

Sex	Family Workers	Hired workers	Total	Percentage
Male	127	36	163	70%
Female	13	3	16	6%
Children	44	13	57	24%
Total	184	52	236	100
Percentage	78%	22%	100%	

It shows that family labour has been used more than hired labour in household units. The percentage of child labour is quite high (24%) which indicates the exploitation of children. Generally artisans perform their work under poor working condition which endanger their health and safety. The financial position of these artisans has been found to be very weak mainly due to the indebtedness and nonproductive expenditures. Besides, the artisans directly employed in the factories are low paid and those who work independently have also a weak financial base.

The following table will show the income structure of the artisans engaged in different manufacturing processes and

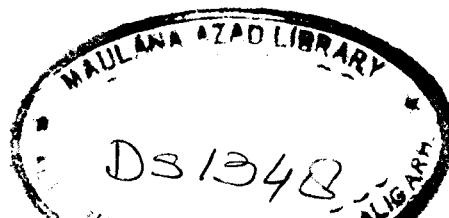
in making different lock components.

Table 19

Income Structure of Various Workers (Monthly)

Nature of work	System of wage payment	Minimum(Rs.)	Maximum(Rs.)
1. Pattern makers	Piece rate	400	600
2. Moulders	Piece rate	300	500
3. Engravers	Piece Rate	250	450
4. Shackle Makers	Piece Rate	350	550
5. Body Makers	Piece Rate	350	550
6. Key Makers	piece Rate	350	550
7. Galvenisers	Piece Rate	400	500
8. Hand Polishers	Piece Rate	350	500
9. Mochine Polishers	" "	500	600
10. Assemblers	Piece rate	350	500
11. Packers	Piece Rate	350	500

It is a fact that these artisans are low paid compared to their hard work they put in. But more important point is that they do not spend their money economically. A large portion of their income is generally spent for non-productive purposes like marriages festivals etc.



The following table shows an approximate idea of the mode of expenditure of the artisans covered during survey.

Table 20
Mode of Expenditure of Artisans

Expenditure on	Percentage of income spent (%)
1. Food and other essential commodities	69
2. Education	2
3. Entertainments and recreation	10
4. Non-Productive purposes like marriages, festival social customs etc.	16
5. Savings	3

It shows that while a considerable percentage of their income (16%) is spent on non-productive purposes a only 2% is spent on education and the percentage of the income saved monthly is even less (3%).⁴

Besides these non-production expenses, indebtedness is also responsible for their poor financial condition which results in overall backwardness. To buy raw materials artisans

borrow money from the private money lenders who have their own interest in the work of these artisans either as a manufacturer or trader. The former lend the money to the latter at high rates of interest and thereby enforce the obligated artisan to sell back the produce to the money lender. These money lenders buy the produce at cheap rates and thereby charge exorbitant rate of interests and profits. Artisans obtain a nominal profit out of the sale of their produce and therefore remain in the same poor condition as before.

The solution of this problem is not an easy one . because one must give consideration to all. Only financial help cannot work to bring out these artisans from the existing backwardness and stagnation of their career. Some of the leading banks have started some special scheme to help these artisans but repayment trends showed very poor results.¹ It indicates that the loans were not used for productive purposes. Still, we cannot say that they do not need financial help. There should be drastic changes in the present loan policies. The needs of the artisans should be given greater emphasis. If there is not uniformity in disbursement of loans and the backward class will not be benefited it will fail to achieve the basic aim of small scale industries i.e. raising levels of earnings and standard of living of a large number of artisans, craftsmen and small entrepreneurs.

The government should start special schemes for the uplift of this most unprivileged class and implementations should be made on a grass root basis. These artisans are the actual base of the industry and as long as the base is weak the overall conditions cannot be improved. Even if total production of the industry increases while condition of artisans remains poor it will mean greater share of profit to the capitalist class and exploitation of the weaker section of society a contrast to what over planning aims (a socialistic pattern of society; a movement towards greater equality in income and wealth, and a progressive reduction in concentration of wealth, income and economic power).

Recently, the state government has given its approval to Tala Nagari Project proposed by District Industry Centre of Aligarh.² This project has been proposed especially to help the inorganised sector of the lock industry, i.e. household and cottage industries to rehabilitate these artisans and to provide them a proper place where they can work in better conditions. It is also proposed to arrange living places close to their workshops. If properly implemented this scheme prove to be a land mark for Aligarh Lock Industry.

DIC and SJSTI have to take the initiative to uplift this most unprivileged class of the lock society. To make the scheme a success, these institutions have to give special attention to get the project implemented properly according

to the proposed channels. The cottage and household unit owners should be given complete information about the facilities arranged for them. These artisans should also be aware of the opportunities to earn more and to escalate their business. With an increase in their income they will be able to produce a better quality and with higher earnings they can lead a better life on one hand, and quality of locks will improve on the other. Thus, it may effect in the long run effect in bringing out the artisans from their existing conditions to a better one.

To make the scheme a success there is also a need of providing all the possible infrastructural facilities to the proposed Tala Nagri Project. Because artisans will hesitate in leaving their dwelling place if sufficient facilities are not available at their new working place. The state government should give special attention in providing infrastructural facilities of roads, schools, markets, parks etc. With the help of this scheme government can improve the living conditions of poor household and cottage industrialists.

A strict vigilance is needed by the DIC officials to check that more and more needy artisans should be benefited under the proposed scheme. These artisans should be given preferential treatment as they need more and more attention by the government.

Thus a drastic change is needed in case of cottage and household industries of Aligarh Lock Industry. These artisans can certainly improve their business if they are brought out of the poor, financial, living and working conditions. The technology will improve and with a better technology the household units will be gradually converted into small factories.³

R E F E R E N C E S

1. Lock Industries in Aligarh (U.P.) A Survey With Special Reference to Bank Finance to Lock Artisans/Units Engaged in Production of Locks, July 1985: Canara Bank.
2. Draft Seventh Five Year Plan, op. cit., p. 356.
3. Staley and Morse, op.cit., p. 94.

CHAPTER VII

CHOICE OF TECHNIQUE

In this chapter we prefer to deal with the technical aspects of the lock manufacturing industry in Aligarh. Our main focus of attention would be on the question of choice of technique and the labour problems. The industry has not been treated from the contemporary stand point of economic development upto now. The industry, even after more than a century of its existance in the region, is run on the same traditional lines as before. The improvments in production techniques are negligible. The existing technology is outdated and obsolete, which is one of the major draw backs of the industry. The manufacturing operations are carried out mostly with the help of manual appliances which increases the cost of production and affect the quality of locks, as a result of which the durability and finishing of lock remains poor.

While lock industry retains its position in the national market, even with the existing outdated and primitive technology, in foreign markets, it has lost its value. The export of locks from Aligarh are negligible now. Most of the lock manufacturers have adopted a cheap goods strategy that is low prices with low quality. This strategy can work in the case

of the local customers but that too for a short period. However, in the long run for purposes of extending their business in international markets, this strategy will be an utter failure.

The present trend of highly labour intensive technique in lock industry with earthy and traditional tools, however, indicates an economy with a huge labour force and very limited supply of capital. Still the competitive pressures in international and domestic market makes the ground, for the use of improved technology, quite strong. Aligarh locks have been chucked out of the foreign market mainly due to poor techniques used in manufacturing processes and as a consequence the failure of the industry in assuring the manufacture of products of good quality.

Therefore, the prerequisite at this stage is introduction of appropriate technology of lock manufacturing. The industry should be modernised in order to break the existing stagnation in it. Complete mechanisation is not possible; and therefore is not suggested because the industry is highly labour intensive and runs mainly on the basis of cottage and household units. To meet such a situation both traditional and modern methods have to be run side by side at least for a few more decades.

But before coming to any conclusion about the choice of technology, which is most suitable for lock industry, it would be pertinent to study the output of different units against the capital invested per labour, ratio capital to labour ratio is defined as the ratio of capital invested in plant and machinery to number of employee working in that unit. In other words, with a view to highlight the productivity aspect of the lock industry, it is necessary to interpret capital, employment and output in their correlationship.

The data were collected through random sampling out of the registered units surveyed, covering different aspects of industry from which the capital labour ratio can be deduced. How the output behaves or how the output is functionally related to capital labour ratio, can be decided from graphical method of plotting capital labour ratio (on Y-axis) against output (on X-axis) for three years 1980, 1982 and 1984.

The graph clearly shows that with increase in capital labour ratio i.e. capital invested per labour, the output has also increased in all the three years of 1980, 82, 84. In all the three plots we find a steady rise in output with the rise in capital labour ratio which means that output is a direct function of capital labour ratio i.e., output $\propto \beta$

where $\beta = K/L$ (Capital labour ratio)

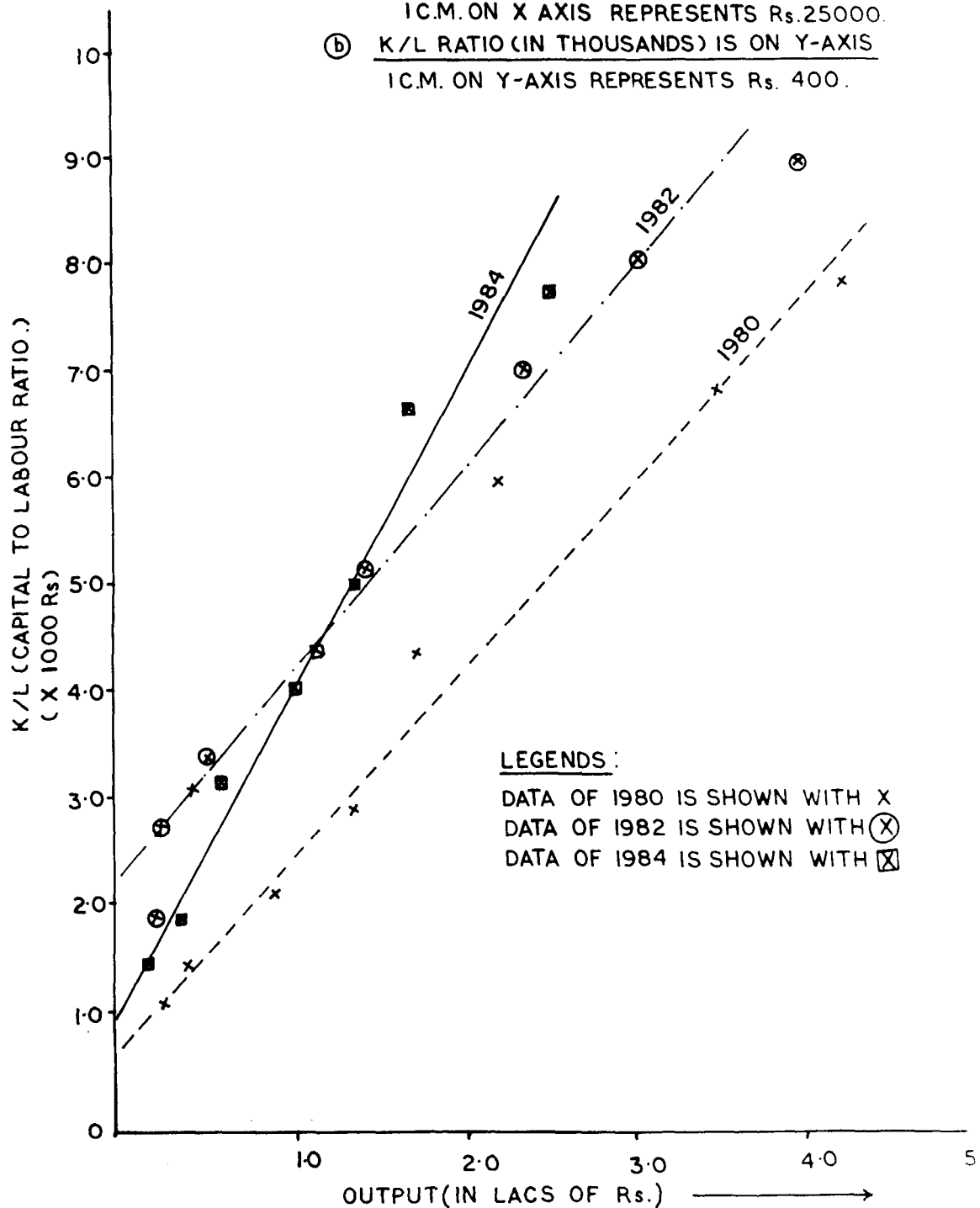
THE GRAPH BETWEEN CAPITAL TO LABOUR RATIO (K/L) AND OUTPUT

SCALE: (a) OUTPUT (IN LACS OF Rs) IS ON X-AXIS.

1 C.M. ON X AXIS REPRESENTS Rs. 25000.

(b) K/L RATIO (IN THOUSANDS) IS ON Y-AXIS

1 C.M. ON Y-AXIS REPRESENTS Rs. 400.



The lines plotted have a positive gradient in all three years. Since, with increased mechanisation the capital invested per labour rises, it can easily be inferred using graphical technique, that output will increase proportionally as capital labour ratio increases.

Generally speaking, mechanisation is supposed to be harmful for the labour class. It is argued that it will result in large scale unemployment and will leave a large labour force without work. But any change cannot be brought about at once in an economy; they are rather gradual.¹ Moreover considering the economic structure of the country where complete mechanisation is not possible, due to the huge labour force and scarcity of capital, the units can be converted from traditional to semi-mechanised ones. In other words, an intermediate technology can be adopted which is more productive than the primitive one but cheaper than sophisticated and highly capital intensive technology of modern industry.² And even with machines labour is also needed and therefore still there will be demand for labour though for skilled one.

Besides, at present, in the household industries the family labour (children and women) also comprises a considerable proportion of labour force. That proportion will not be considered unemployed if the demand for labour decreases. With the help of improved technology the workers will be able

to enhance the quality as well as the quantity of their product in lesser time. They will be able to earn more and can lead a better life.

Not only the quality and quantity of locks will improve with infusion of machines but there will be an additional saving in the form of reduced rejection of lock samples. The rejections crop up due to bad quality of finished products and has to be absorbed by the manufacturers. With improved technology, not only the rejections are reduced due to consistently good quality but also the material losses, such as those caused by uneven cutting or hammering by manual labour, are reduced considerably.

But in practice, the owners of the small industries have been reluctant to introduce labour saving equipments in existing system because the labour supply for the industry is highly elastic and therefore available at cheaper rates. As most of the work in factories is performed on contract basis and except paying for the work the owners have no responsibility to workers as such, since they do not comprise a permanent labour force. The small firms are not required to keep an upto date record and make it known like the large ones. The laws regarding labour welfare therefore, are not enforced in these units, rather they avoid the enforcement

of these laws. Thus these firms can use more and more labour at comparatively cheaper rates without having any obligation towards them.

Secondly, to introduce new machines, a firm must have the capital available to purchase such equipment, and here lies the main problem. It is a well known fact that the capital available for small scale sector is limited, with comparatively higher rates of interest. Entrepreneurs find it quite difficult to expand or to start a new plant unless they have sufficient financial resources of their own. But it has been observed that even those entrepreneurs who have sufficient financial resources are reluctant to adopt the modern techniques because of the risk involved in investing their money in machines and plants; They find labour more adjustable and cheap.

The result of this complacent attitude towards any improvement in technology has cost these manufacturers the buyers in western Europe and U.S.A. The lack of innovative ideas and obsolete technology may land this industry in serious financial crisis when profits turn into losses. Thus, it is the responsibility of central and state government to pay special attention to the lock industry of Aligarh and to put this traditional industry on the path of modernisation which in turn will help in widening the national and

international markets, for locks. The entrepreneurs should be encouraged to invest more capital in plant and machinery which will lead to higher quality and varying variety of locks. With improved techniques, cost of production can be reduced and it is certain that with lower cost better quality Aligarh locks can certainly explore foreign markets.

There is a lack of innovation in the lock industry which leads to sluggish improvements in design and technology. This is a classical example of an industry, sans any research and development of its own, which has been considered essential with almost all the industries, be it a problem of technology or marketing difficulties. To carry out the structural changes in the industry, the establishment of a Research and Development cell with efficient staff is absolutely essential. It should be armed with the responsibility of finding out new vistas and new techniques in the field of lock manufacturing. It should help those entrepreneurs who are willing to take initiative to introduce new machines in their units and should look into designs and supply of improved dies, tools etc. Besides, these techniques should also be economic, within the reach of entrepreneurs.

In order to bring out technical awareness among the artisans, a training centre should be started³, to impart technical training and to develop a perception of improved

methods of locksmithy among them.

Along with this, a strong financial structure is also needed, as capital is the first requisite to absorb the modern technology. The credit system prevailing now, continues to be with 'security oriented approach'. It should have, instead, a 'development oriented approach' to accelerate the rate of growth of the industry. The present trend with financial institutions and commercial banks, is to provide additional credit through traditional norms like reduction in interest, liberal instalments, extension of small subsidies and grants for developmental and promotional expenses and other similar acts like reducing the rigidity of collateral securities. It has proved helpful to entrepreneurs working on traditional lines. But for the entrepreneurs with revolutionary ideas and innovative skills, it is difficult to muster up sufficient financial support, due to conservative tones in lending facilities.

Something must be done by financial Institutions so that credit support in the form of venture capital, risk capital, equity participation, innovation finance, reconstruction finance may be provided to adventurous and innovative entrepreneurs. This is the only way of speeding up the rate of progress of the industry by applying both orthodox as well as unorthodox banking techniques.

R E F E R E N C E S

1. The Works and Correspondence of David Ricardo
(ed.), Peiro Saraffa with the Collaboration of
M.H. Dabb, Vol. I, (University Press, Cambridge:
1953) p. 395.
2. E. F. Schumacher, Small is Beautiful A Study of Econo-
mics as if People Mattered, (London: 1973) p. 167.
3. Staley and Moise, op. cit., p. 60

CHAPTER VIII

CONCLUSIONS AND SUMMARY

This study leads to the conclusion that lock industry of Aligarh has bright prospects if guided on sound lines. But there are a number of factors which hamper the growth of the industry, like poor technology, inadequate financial assistance, inefficient marketing etc. These problems can be discussed in brief as follows.

1. The industry still runs on traditional and primitive technology which affects the quality of locks as a result of which internal and external markets for lock are also affected adversely.
2. The financial assistance available through various sources like Banks. Non-Banking Financial institutes etc, is not sufficient for meeting the financial requirements of lock manufacturers.
3. The industry faces a grave problem regarding the availability of raw materials. More often than not manufacturers are subjected to artificial scarcity of materials and inflated prices. Moreover, the quality available may not be suitable for lock manufacturers.
4. The marketing methods are not modern and scientific. In this age of competition, when advertising and popularising

the product is necessary to escalate sales, there is no provision of advertising the products systematically in lock industry.

5. There is no scientific method of quality control in the industry. Most of the inspection is done by employing physical observation technique by experienced hands.
6. Most of the entrepreneurs have poor information about overseas markets and trading centres. Poor knowledge of export facilities and export marketing techniques has discouraged most entrepreneurs from attempting the exports of locks. Their own set up also does not permit most manufacturers to go into lengthy arbitration and paper work related to exports.

The above-mentioned problems of the lock industry can be solved to a greater extent if the central and state government give special attention to this industry with the help of the following steps -

1. There should be a Research and Development cell to find out the new techniques which are suitable for lock manufacturers, keeping in mind their economic limitations and capacities.
2. Entrepreneurs should be encouraged to adopt improved technology. These traditional units should be converted into semi-mechanised units with the help of intermediate technology.

3. There should be a training centre to impart training to the entrepreneurs regarding the modern and scientific methods of marketing and advertising their products.
4. Artisans should also be given training to use improved tools in manufacturing locks.
5. Government local Depot for raw material should be set up in Aligarh so that the entrepreneurs would be able to avoid those difficulties which they face in arranging the raw material from far-off depots.
6. Financial Institutions should give more attention to the lock manufacturers. There should be special schemes for providing financial assistance to the artisans. On the other hand, financial assistance should also be made available to those who are interested in modernising their units with the help of improved technology.
7. For the products standardisation, improved and scientific methods should be used 'Quality Marking Scheme' started by "Directorate of Industries, U.P." should be made compulsory for all the lock manufacturers.
8. The entrepreneurs should be provided sufficient information regarding the opportunities and procedures of exports.

9. There should be special concessions in taxes for the lock manufacturers.
10. Special attention should be paid to improve the condition of household units. The present working conditions of these household units which are extremely poor should be changed. These artisans have to be given all the facilities to come out of the existing stagnation of their economic condition.

Thus, lock Industry needs a planned growth, reorganisation and sound footing, which can ensure the expansion of the industry and improvement in the condition of lock manufacturers especially small artisans, who represent the base of the industry.

B I B L I O G R A P H Y

BOOKS

- Ahuja, B.N., A Hand book of Small Scale Industries in India, Delhi, Varma 1977.
- Brahmananda, P., Planning for a Future-less Economy, Bombay, Himalayan Publishing House, 1978.
- Brahmananda, P., and Vakil, C.N., Planning for an Expanding Economy, Bombay, Vora, 1956.
- Desai, V., Problems and Prospects of Small-Scale Industries in India, Bombay, Himalayan Publication, 1983
- Dhar, P.N., and Jydall, H., The Role of Small Enterprises, Bombay, Asia, 1961.
- Dholkhie, Bakul, H., The Source of Economic Growth in India, Baroda, Good Companion Publishing House, 1947.
- Gadgil, D.R., Planning and Economic Policy in India, Pune, Gokhle Institute of politics and Economic, 1972.
- Gandhi, M.K., The Economics of Village Industries, Ahmadabad, 1948.
- Joshi, N.C., Cottage and Small-Scale Industries in India: A study, Suneja Book Center, 1966.

Lakdawala, D.I. and Sandesra, J.C., Small Industry in a big City, A survey in Bombay, 1960.

Mehan, K.K., Small industry Entrepreneurs hand book, Bombay, Productivity Services International, 1973.

Mitra, L.K., Employment and Out put in Small Enterprises of India, Calcutta, 1967

Nurkse, Raghar., : Problem of Capital Formation in under developed Countries, Bombay, 1962

Paliwala R.C., Small Industries; a reference book, Delhi, Small business Pub., 1973.

Sandesra, J.C., Size and Capital Intensity in Indian Industry, Bombay, 1969.

Schumacher, E.F., Small is Beautiful, Delhi, Radhakrishna, 1977.

Singh, B., The Economics of Small Industries a case study of Small-Scale Industries establishment of Moradabad, Delhi, 1961.

Sraffa, Piero., (Ed.) The Works and Correspondence of David Ricardo, Cambridge University Press, 1953.

Staley, E. and Morse, R., Modern Small Industry for Developing Countries New York, McGraw Hill, 1965.

Tulsi, S.K., Incentives for Small-Scale Industry: an Evalution,
New Delhi, 1980.

Vepa,, R.K., Small Industry Development Programme, New Delhi
Indian Institute of Public Administration, 1963.

REPORTS

Canara Bank, District Credit Plan 1983-85 for Aligarh District
(Uttar Pradesh).

Government of India, Annual Report of Small Industries
Development Organisation 1983-84, New Delhi, 1984.

- Small Scale Industries in India Facts and Figures
New Delhi, 1985.
- Small Scale Industries, Policies Programmes and
Institutional Support. New Delhi, 1983.

Government of Uttar Pradesh, Draft Seventh Five Year Plan
1980-85.

- Draft Sixth Five year Plan, 1985-90

I.C.S.S.R., A Survey of Research in Economics, Vol. V(Industry)
Allied Publishers 1975.

N.C.A.E.R, Techno-economic Survey of Uttar Pradesh, Delhi,
1965.

National Productivity Council, Pilot Project for Improving Productivity of Lock Manufacturing Units of Aligarh, New Delhi, 1983

PERIODICALS

Aggarwal, C.S., Growth strategy for small sector, Financial Express, 3 September, 1980, p-5.

Bhattacharyya, H.K., Changing Concept of small scale industries in India, Yojana 16-30 April, 1982, pp. 6-9.

Chaddha, Chetan., The growth of small scale industries, Yojana 16 November, 1978, p. 21-22.

Chattopadhyaya, A., Prospects and problems of small-scale industry, Radical Humanist, August, 1980, pp. 53-58.

Ganguly, S., Manpower for small industry, Commerce, 15 August, 1981, p. 320.

Gupta, R.K., Choice of technology for small industry, Journal Industry and Trade, January 1979, p. 31-32.

Jain, S.K., The role of small scale industries in creating employment opportunities, Devel Policy and Administrative Review, July-December, 1978, p. 9-10.

Kasbekar, S.R., SSIs: Incentives not a major force, Economic Times(Supplement), 17 September 1980, p.1:

1 - 4 P

Krishna, P.V., Integration of village and small industries, Khadi Gramodyog, March 1980, p. 245-51.

Kumar, B., Growth of small units, The Economic Times, (Supplement) 18 December 1981, p. 1.

Mahajan, V.S., Accelerating growth of small and tiny units, Khadi Gramodyog, October 1980, p. 68 - 70.

Mishra, Girish., Big business penetration in small sector, Link, 26 February, 1984, pp. 22-23.

Mishra, G.P. and Mishra, P.N., Government policies for promoting small scale industries, GCCI Bulletin, 10 October 1979, p. 9-21.

Mishra, P.C., Small Sector, its role in Indian economy and new incentives for its development. Economic Studies, February - March 1979, p. 397-406.

Nag, A., Growth of the small-scale sector: An assessment, Yojana, 16 December 1978, p. 27-30.

Nagaraj, R., Sub-contracting in Indian Manufacturing industries, Economic and Political Weekly, August 1984, pp. 1435-1445.

Nalapat, M.D., Small industry: Unfettered growth and indifference, Economic Times, 16 July 1984, p. 5

- Pathak, H.N., A comprehensive view of policy for developing small enterprises, SEDME, March 1979, p. 56-63.
- Patnaik, P., Some implications of economic strategy underlying 1985-86 budget, Economic and Political Weekly, 26 April 1985, pp. 699-705.
- Rai, H.L. and Brahmananda, G.N., Problem of Small Sector, Capital, May 11, 1981, p. 18.
- Rele, S.J., Small Scale Sector: barriers to growth, Eastern Economist, August 17, 1979, pp. 353-354.
- Rele, S.J., Small scale sector : Modernisation Crucial for progress. Eastern Economist, November 1980 p. 1156 - 58.
- Sahneym M., Towards drawing the Seventh plan., Financial Express, June 24, 1984. p. 4.
- Saheny, M., Quality Exports from Small sector, Financial Express, June 7, 1984. p.5
- Saheny, M., Upward revision of Small Industry, definition, Financial Express, September 3, 1980.
- Sen, Mankumar., How vital is the Small-scale sector? Capital, Annual 1983, pp. 89-93.
- Singh, Y.R., Small Sector: Some issues, Financial Express, August 20, 1980, p.5.

Tayabji, Nasir, Nature of Small Scale Enterprise, development,
Economic and political Weekly, August 1948, p.p
1425-1432.

Venkata Rao, B.S. Small Industry: Unfettered growth and
indifference, Economic Times, July 16, 1984. p. 5

Vepa, Rao.K. Growth policy for small Industry, Eastern
Economist, August 15, 1980, p. 434-35.

Q U E S T I O N N A I R E

Note :- This questionnaire is purely of academic interest and its findings will be used for M.Phil dissertation only, which has to be submitted to the Department of Economics, A.M.U. Aligarh. You are requested to make your valuable contributions to this project by filling in correctly the questionnaire given below :-

SECTION I

1. Title of the firm :
2. Name of Owner(s)/partners:
3. Address :
4. Year of Establishment :
5. Year of Production :

SECTION II

Item : LOCKS		Years of Production					
No.	PARTICULARS	1980	1981	1982	1983	1984	1985
1.	Working Days (per annum)						
2.	Labourers a) Family b) Hired						
3.	Capital Investment a) Fixed b) Working						
4.	Production(in value)						
5.	Exports(if any)						

SECTION III

1. Why did you pick Aligarh only to start your lock industry?
2. Is there some special subsidy by government to entrepreneurs setting up industry in this areas?
3. Was your family in the same business ?
 - a) If yes, did you get basic training through family itself?
 - b) If no, where did you learn the basics of this trade, from?
4. Where did you pick the labour force from?
5. Is the availability of skilled labour a problem?
6. How do you finance your project?
7. Did you face any hardship or unusually delay in release of bank loans?
 - a) If yes, please suggest some remedial steps as borrower to simplify the borrowing process.
8. Are you aware of other financing agencies set up by the government?
 - a) Have you contacted any of these recently?
9. What kind of managerial set up do you have.
 - a) Do you personally supervise all the function and take decisions without any help from sub-ordinates?
 - b) Have you deputed some managers or incharge to supervise the functioning of different departments and report to you?
10. Do you produce a complete lock or just part production for other units also.
 - a) In case you undertake part production is it an obligation on you to supply parts to just one contractor?
 - b) If no, how do you sell your product(parts) in market?
11. What kind of tools you are using out of following -
 - a) Power driven machines
 - b) Semi automatised hand tools
 - c) Manual implements

12. Why is the emphasis on semi-automatised tools and manual implements, if you prefer these?
13. In case you have hand tools, are you planning to modernise your unit by installing machines?
14. Do you plan the production in advance making optimum utilisation of money materials, man and machinery?
15. Do you usually achieve the targets in production?
16. What quality Control techniques are being employed by you?
17. Where do you buy the raw materials from?
 - a) Any difficulty in the availability of raw material?
 - b) If you have any, suggest some solutions.
- ✓ 18. How do you bring about an improvement in your product?
 - a) Do you have a design section of your own to improve the design of locks?
 - b) Suggest some ways in which government can help you in this matter.
18. How do you price your product?
 - a) Any special technique employed, like market survey, consumer survey, before fixing the price?
19. Do you market your product yourself?
 - a) If yes, do you have a sales net-work of your own?
 - b) Do you sell your product to retailers only.
20. Do you utilise the services of the "Middleman" or traders?
21.
 - a) Do you export your product? If yes, name the countries which are importing locks?
 - b) Do you find the export regulation helpful in promoting exports?
 - c) What sort of international competition you face in exports of locks.
22. Do you see a uniform pattern in lock distribution by banks?
23. Do you face labour problems like strikes etc?
24. Any other suggestion towards improvement in your set-up.

Thank you.

LIST OF THE LOCK MANUFACTURING UNITS SURVEYED

M/s Anand Locks Co., Marris Road, Aligarh
M/s Nervy Lock Co., C-7 Industrial Estate, Aligarh.
M/s Anand Engineering Industry, Marris Road, Aligarh
M/s Mico Enterprises, B-6, Industrial Estate, Aligarh
M/s Metro Lock Company, Marris Road, Aligarh.
M/s Lockwell (India), Janakpuri, Aligarh
M/s Zober^x (India), D-55, Industrial Estate, Aligarh
M/s Bajaj Locks (India), C-5, Industrial Estate, Aligarh
M/s Modern Lock manufacturing Co., Ratan Lal Street, Aligarh
M/s Cyclo India, B-5, Industrial Estate, Aligarh
M/s New Janta Metal Industries, Uppor Fort, Aligarh
M/s Moina Enterprises, Usman Para, Aligarh
M/s Jagat Industries, Govind Nagar, Aligarh
M/s Regal Enterprises, Kala Mahal, Aligarh
M/s Venus Metal Product, Sarai Hakeem, Aligarh
M/s Kristo Industries, Jai Ganj, Aligarh
M/s Palson Industries, Rafat Ganj, Aligarh
M/s Jyoti Metal Trading, Gopalpuri, Aligarh
M/s Rock Lock Works, Upper fort, Aligarh
M/s J.K. Locks Company, Madar Gate, Aligarh
M/s Niros Lock Factory, Nagla Masani Aligarh
M/s Brighters India, Katria Street, Aligarh

M/s M.D. Industries, Nai Abadi, Aligarh
M/s Sharda Udyog Gopal Puri, Aligarh
M/s Mars Lock Industries, Upper Fort, Aligarh
M/s Security Hse, Atishbagh, Aligarh
M/s Casio Lock India, Turkman Gate, Aligarh
M/s CEWA Products, Achal Tank, Aligarh
M/s Metalco Coration, Kanwari Ganj, Aligarh
M/s Pawan Lock Industries, Babri Mandi, Aligarh
M/s Scientific Lock Industry, Usman Para, Aligarh.
M/s Ahmad Ali's Lock factory, Nai Abadi, Aligarh
M/s M.R. Industries, Tantanpara, Aligarh
M/s Crownr, Tuman Gate, Aligarh
M/s Metro Lock Company, Gambhir pura, Aligarh
M/s Shanti Metal Works, Khirni Gate, Aligarh
M/s Mico Lock Works, Usman Para, Aligarh
M/s Ratan And., Premier Nagar, Aligarh
M/s Shailendra Metal Works, Jai Ganj, Aligarh
M/s Jawan Industries Gate, Sasni Gate, Aligarh
M/s Deep Industries, Kanoon Goan, Aligarh
M/s Sharda & Ss, Shivpuri, Aligarh
M/s Naveen Industries, Begum Bagh, Aligarh
M/s Ratan Enterprises, Begum Bagh, Aligarh
M/s New Rose Lock Factory, Upper Fort, Aligarh
M/s Noor Metal Works, Tantanpara, Aligarh
M/s U-Like Industries, Tantanpara, Aligarh
M/s Sanjay Enterprises, Gali Gulluji, Aligarh
M/s Parker Lock, Parao Dubey, Aligarh